

IN THE CLAIMS

1 - 28 (Cancelled)

29. (Previously Presented) A method of manufacturing a glazing panel having a solar factor (FS) of less than 70% and a luminous transmittance (TL) of less than 70%, and being comprised of a vitreous substrate and a tin/antimony oxide coating layer provided on the vitreous substrate and having a Sb/Sn molar ratio ranging from 0.01 to 0.5, the method comprising the steps of:

providing reactants in gaseous phase which comprise tin and antimony compounds, which are present in an amount effective to form the tin/antimony oxide coating layer; and

forming the tin/antimony oxide coating layer pyrolytically on the vitreous substrate from the reactants in gaseous phase to provide, based on at least the Sb/Sn molar ratio and the thickness of said tin/antimony oxide coating layer, the glazing panel having a solar factor (FS) of less than 70% and a luminous transmittance (TL) of less than 70%.

30. (Previously Presented) A method according to Claim 29, wherein the reactants in the gaseous phase comprise a gaseous reactant mixture, and wherein the tin/antimony oxide coating layer is formed pyrolytically on the vitreous substrate by bringing the gaseous reactant mixture comprising a source of antimony and a source of tin into the presence of a heated source of oxygen.

31. (Previously Presented) The method according to Claim 29, further comprising the steps of:

mixing the reactants in the gaseous phase to provide a gaseous reactant mixture;
feeding the gaseous reactant mixture to a first nozzle;
feeding the superheated water vapor to a second nozzle; and

causing the gaseous reactant mixture from the first nozzle to be brought into the presence of the superheated water vapor from the second nozzle so as to form the tin/antimony oxide coating layer on the vitreous substrate.

32. (Previously Presented) The method according to Claim 29, further comprising the step of depositing at least one intermediate coating layer between the vitreous substrate and the tin/antimony oxide coating layer.

33. (Previously Presented) The method according to Claim 29, further comprising the step of depositing at least one intermediate coating layer between the vitreous substrate and the tin/antimony oxide coating layer, the at least one intermediate coating layer comprising at least one coating layer selected from the group consisting of a haze reducing coating layer and an anti-reflection coating layer.

34. (Previously Presented) The method according to Claim 29, further comprising the step of depositing at least one intermediate coating layer between the vitreous substrate and the tin/antimony oxide coating layer, the at least one intermediate coating layer containing at least one coating layer selected from the group consisting of a haze reducing coating layer and an anti-reflection coating layer and being comprised of one of SiO_2 and SiO_x .

35. (Previously Presented) The method according to Claim 29, further comprising the step of depositing at least one additional coating layer comprised of tin oxide doped with fluorine on the tin/antimony oxide coating layer.

36. (Previously Presented) The method according to Claim 29, further comprising the step of depositing at least one additional low-emissivity coating layer on the tin/antimony oxide coating layer from reactants in a gaseous phase.

37. (Previously Presented) The method according to Claim 29, wherein the tin/antimony oxide coating layer has a Sb/Sn molar ratio ranging from 0.03 to 0.5.
38. (Previously Presented) The method according to Claim 29, wherein the tin/antimony oxide coating layer has a Sb/Sn molar ratio ranging from 0.05 to 0.5.
39. (Previously Presented) The method according to Claim 29, wherein the tin/antimony oxide coating layer has a Sb/Sn molar ratio ranging from 0.05 to 0.15.
40. (Previously Presented) The method according to Claim 29, wherein the tin/antimony oxide coating layer has a Sb/Sn molar ratio ranging from 0.03 to 0.09.
41. (Previously Presented) The method according to Claim 29, wherein the tin/antimony oxide coating layer has a thickness ranging from 100 to 500 nm.
42. (Previously Presented) The method according to Claim 29, wherein the tin/antimony oxide coating layer has a thickness ranging from 250 to 450 nm.
43. (Previously Presented) The method according to Claim 29, wherein the glazing panel has a solar factor (FS) of less than 60%.
44. (Previously Presented) The method according to Claim 29, wherein the glazing panel has a solar factor (FS) of less than 50%.
45. (Previously Presented) The method according to Claim 29, wherein the glazing panel has a luminous transmittance (TL) of less than 60%.
46. (Previously Presented) The method according to Claim 29, wherein the glazing panel has a luminous transmittance (TL) ranging from 40 to 65%.
47. (Previously Presented) The method according to Claim 29, wherein the vitreous substrate is a clear sheet of glass.

48. (Previously Presented) The method according to Claim 29, wherein the vitreous substrate is a colored sheet of glass.

49. (Previously Presented) The method according to Claim 29, wherein the glazing panel is a monolithic glazing panel.

50. (Previously Presented) The method according to Claim 29, wherein the tin/antimony oxide coating layer is an exposed coating layer.

51. (Previously Presented) The method according to Claim 29, wherein the reactants in gaseous phase which are effective to form the tin/antimony oxide coating layer comprise a source of tin which is monobutyl trichloro tin (MBTC).

52. (Previously Presented) The method according to Claim 29, wherein the reactants in gaseous phase which are effective to form the tin/antimony oxide coating layer comprise a source of antimony which is an organo antimony compound.

53. (Previously Presented) A method of manufacturing a glazing panel having a solar factor (FS) of less than 70% and being comprised of a vitreous substrate and a tin/antimony oxide coating layer provided on the vitreous substrate and having a Sb/Sn molar ratio ranging from 0.03 to 0.5, the method comprising the steps of:

providing reactants in gaseous phase which comprise tin and antimony compounds, which are present in an amount effective to form the tin/antimony oxide coating layer; and

forming the tin/antimony oxide coating layer pyrolytically on the vitreous substrate from the reactants in gaseous phase to provide, based on at least the Sb/Sn molar ratio and the thickness of said tin/antimony oxide coating layer, the glazing panel having a solar factor (FS) of less than 70%.

54. (Previously Presented) The method according to Claim 53, wherein the reactants in the gaseous phase comprise a gaseous reactant mixture comprising a source of tin and a source of antimony, and wherein the tin/antimony oxide coating layer is formed pyrolytically on the vitreous substrate by bringing the gaseous reactant mixture into the presence of a heated source of oxygen.

55. (Previously Presented) The method according to Claim 53, further comprising the steps of:

mixing the reagents in the gaseous phase to provide a gaseous reactant mixture;

feeding the gaseous reactant mixture to a first nozzle;

feeding the superheated water vapor to a second nozzle; and

causing the gaseous reactant mixture from the first nozzle to be brought into the presence of the superheated water vapor from the second nozzle so as to form the tin/antimony oxide coating layer on the vitreous substrate.

56. (Previously Presented) The method according to Claim 53, further comprising the step of depositing at least one intermediate coating layer between the vitreous substrate and the tin/antimony oxide coating layer.

57. (Previously Presented) The method according to Claim 53, further comprising the step of depositing at least one intermediate coating layer between the vitreous substrate and the tin/antimony oxide coating layer, the at least one intermediate coating layer comprising at least one coating layer selected from the group consisting of a haze reducing coating layer and an anti-reflection coating layer.

58. (Previously Presented) The method according to Claim 53, further comprising the step of depositing at least one intermediate coating layer between the vitreous substrate and the

tin/antimony oxide coating layer, the at least one intermediate coating layer comprising at least one coating layer selected from the group consisting of a haze reducing coating layer and an anti-reflection coating layer, and being comprised of one of SiO_2 or SiO_x .

59. (Previously Presented) The method according to Claim 53, further comprising the step of depositing at least one additional coating layer comprised of tin oxide doped with fluorine on the tin/antimony oxide coating layer.

60. (Previously Presented) The method according to Claim 53, further comprising the step of depositing at least one additional low-emissivity coating layer on the tin/antimony oxide coating layer from reactants in a gaseous phase.

61. (Previously Presented) The method according to Claim 53, whereby the glazing panel has a luminous transmittance (TL) of less than 70%.

62. (Previously Presented) The method according to Claim 53, wherein the tin/antimony oxide coating layer has a Sb/Sn molar ratio ranging from 0.05 to 0.5.

63. (Previously Presented) The method according to Claim 53, wherein the tin/antimony oxide coating layer has a Sb/Sn molar ratio ranging from 0.05 to 0.15.

64. (Previously Presented) The method according to Claim 53, wherein the tin/antimony oxide coating layer has a Sb/Sn molar ratio ranging from 0.03 to 0.09.

65. (Previously Presented) The method according to Claim 53, wherein the tin/antimony oxide coating layer has a thickness ranging from 100 to 500 nm.

66. (Previously Presented) The method according to Claim 53, wherein the tin/antimony oxide coating layer has a thickness ranging from 250 to 450 nm.

67. (Previously Presented) The method according to Claim 53, wherein the glazing panel has a solar factor (FS) of less than 60%.

68. (Previously Presented) The method according to Claim 53, wherein the glazing panel has a solar factor (FS) of less than 50%.

69. (Previously Presented) The method according to Claim 53, wherein the glazing panel has a luminous transmittance (TL) of less than 60%.

70. (Previously Presented) The method according to Claim 53, wherein the glazing panel has a luminous transmittance (TL) ranging from 40 to 65%.

71. (Previously Presented) The method according to Claim 53, wherein the vitreous substrate is a clear sheet of glass.

72. (Previously Presented) The method according to Claim 53, wherein the vitreous substrate is a colored sheet of glass.

73. (Previously Presented) The method according to Claim 53, wherein the glazing panel is a monolithic glazing panel.

74. (Previously Presented) The method according to Claim 53, wherein the tin/antimony oxide coating layer is an exposed coating layer.

75. (Previously Presented) The method according to Claim 53, wherein the reactants in gaseous phase which are effective to form the tin/antimony oxide coating layer comprise a source of tin which is monobutyl trichloro tin (MBTC).

76. (Previously Presented) The method according to Claim 53, wherein the reactants in gaseous phase which are effective to form the tin/antimony oxide coating layer comprise a source of antimony which is an organo antimony compound.

77. (Previously Presented) A method of manufacturing a glazing panel comprising the steps of:

depositing at least one intermediate coating layer on a clear glass ribbon substrate during formation of the glass ribbon whilst it is still hot by bringing the substrate into contact with a gaseous medium comprising a reactant mixture in the gaseous phase;

providing reactants in gaseous phase which comprise tin and antimony compounds, which are present in an amount effective to form a tin/antimony oxide coating layer;

forming the tin/antimony oxide coating layer pyrolytically on the glass ribbon substrate during formation of the glass ribbon whilst it is still hot by bringing the substrate into contact with a gaseous medium comprising the reactant mixture in the gaseous phase so that the at least one intermediate layer is between the glass substrate and the tin/antimony oxide coating layer;

forming the tin/antimony oxide coating layer so that the tin/antimony oxide layer has a thickness between 100 and 470 nm and a Sb/Sn molar ratio which is at least 0.03 and which is less than 0.15 and so as to provide, based on at least the Sb/Sn molar ratio and the thickness of said tin/antimony oxide coating layer, the coating glazing panel having a CIE solar factor (FS) of less than 60% and a luminous transmittance (TL) measured with illuminant C of between 40% and 65%;

depositing at least one additional coating layer comprised of tin oxide doped with fluorine on the tin/antimony oxide coating layer;

and wherein the coated glazing panel has a luminous reflectance (RL) measured with illuminant C of less than 11%.

78. (Previously Presented) The method according to Claim 77, wherein each pyrolytic coating step is carried out a temperature of from 550° to 750° C.

79. (Previously Presented) The method according to Claim 77, wherein the coatings are formed inside a lehr which follows the glass ribbon forming device.

80. (Previously Presented) The method according to Claim 77, wherein the coatings are formed inside a float tank on the top face of the glass ribbon whilst the latter is floating on a bath of molten tin.

81. (Previously Presented) The method according to Claim 77, wherein the haze is 1.2% or less.

82. (Currently Amended) The method according to Claim 77, wherein the dominant wavelength in transmission of the glazing panel measure with Illuminant C is in the range 470 nm - 490 nm.

83. (Previously Presented) The method according to Claim 77, wherein the Sb/Sn molar ratio is in the range 0.053 to 0.09 inclusive.

84. (Currently Amended) The method according to Claim 77, wherein the luminous transmittance (LT) (TL) of the glazing panel is 61.6% or less.

85. (Previously Presented) A method of manufacturing a glazing panel comprising the steps of:

depositing at least one intermediate coating layer on a glass ribbon substrate during formation of the glass ribbon whilst it is still hot by bringing the substrate into contact with a gaseous medium comprising a reactant mixture in the gaseous phase;

providing reactants in gaseous phase which comprise tin and antimony compounds, which are present in an amount effective to form a tin/antimony oxide coating layer;

forming the tin/antimony oxide coating layer pyrolytically on the glass ribbon substrate during formation of the glass ribbon whilst it is still hot by bringing the substrate into contact with a gaseous medium comprising the reactant mixture in the gaseous phase so that the at least one intermediate coating layer is between the glass substrate and the tin/antimony oxide coating layer;

forming the tin/antimony oxide coating layer so that the tin/antimony oxide layer has a thickness between 100 and 470 nm and a Sb/Sn molar ratio which is at least 0.03 and which is less than 0.15 and so as to provide, based on at least the Sb/Sn molar ratio and the thickness of said tin/antimony oxide coating layer, the coating glazing panel having a CIE solar factor (FS) of less than 60% and a luminous transmittance (TL) measured with illuminant C of between 40% and 65%;

depositing at least one additional coating layer comprised of tin oxide doped with fluorine on the tin/antimony oxide coating layer.

86. (Previously Presented) The method according to Claim 85, wherein each pyrolytic coating step is carried out a temperature of from 550° C to 750° C.

87. (Previously Presented) The method according to Claim 85, wherein the coatings are formed inside a lehr which follows the glass ribbon forming device.

88. (Previously Presented) The method according to Claim 85, wherein the coatings are formed inside a float tank on the top face of the glass ribbon whilst the latter is floating on a bath of molten tin.

89. (Previously Presented) The method according to Claim 85, wherein the haze of the glazing panel is 1.2% or less.

90. (Currently Amended) The method according to Claim 85, wherein the dominant wavelength in transmission of the glazing panel measured with Illuminant C is in the range 470 nm - 490 nm.

91. (Previously Presented) The method according to Claim 85, wherein the Sb/Sn molar ratio is in the range of 0.053 to 0.09 inclusive.

92. (Currently Amended) The method according to Claim 85, wherein the luminous transmittance (LT) (TL) of the glazing panel is 61.6% or less.

93. (Previously Presented) The method according to Claim 85, wherein the coated glazing panel has a luminous reflectance (RL) measured with illuminant C of less than 11%.

94. (New) A method according to Claim 29, wherein the glazing panel has a luminous reflectance (RL) measured with Illuminant C of less than 11%.

95. (New) A method of manufacturing a glazing panel comprising:
pyrolytically forming a tin/antimony oxide coating layer on a vitreous substrate from tin and antimony compounds in a gaseous phase;
depositing at least one additional coating layer comprising tin oxide doped with fluorine on the tin/antimony oxide coating layer;
wherein the tin/antimony oxide coating layer has a Sb/Sn molar ratio of from 0.01 to 0.5 and wherein the glazing panel has a solar factor (FS) of less than 70%.